

Abstract

The present invention relates to systems and methods for generating and/or modulating illumination conditions to generate high-quality light of a desired and controllable color, for creating lighting fixtures for producing light in desirable and reproducible colors, and for modifying the color temperature or color shade of light
5 within a prespecified range after a lighting fixture is constructed. In one embodiment, LED lighting units capable of generating light of a range of colors are used to provide light or supplement ambient light to afford lighting conditions suitable for a wide range of applications.